

Search history

Keys 10/795995

02/27/2006

=> d his

(FILE 'HOME' ENTERED AT 10:24:30 ON 27 FEB 2006)

FILE 'STNGUIDE' ENTERED AT 10:24:49 ON 27 FEB 2006

FILE 'REGISTRY' ENTERED AT 10:25:26 ON 27 FEB 2006
ACT KEYSFLUSTRA/A

L1 STR
L2 11 SEA FILE=REGISTRY SSS FUL L1

ACT KEYSFLUSTRB/A

L3 STR
L4 6 SEA FILE=REGISTRY SSS FUL L3

FILE 'STNGUIDE' ENTERED AT 10:27:00 ON 27 FEB 2006

FILE 'REGISTRY' ENTERED AT 10:27:10 ON 27 FEB 2006

L5 7349854 S S>0
L6 339026 S O>2 AND F>1 AND L5

FILE 'STNGUIDE' ENTERED AT 10:30:07 ON 27 FEB 2006

FILE 'REGISTRY' ENTERED AT 10:58:21 ON 27 FEB 2006

L7 STRUCTURE UPLOADED
L8 9 S L7 SAM SSS

FILE 'STNGUIDE' ENTERED AT 10:59:01 ON 27 FEB 2006

FILE 'CAPLUS' ENTERED AT 11:01:39 ON 27 FEB 2006

E US2004-795995/APPS
L9 1 S US2004-795995/AP
SEL RN

FILE 'REGISTRY' ENTERED AT 11:02:53 ON 27 FEB 2006

L10 8 S E1-E8
L11 147 S L7 FULL SSS
SAVE TEMP L11 KEY995STRC/A

FILE 'CAPLUS' ENTERED AT 11:05:47 ON 27 FEB 2006

L12 229 S L11

FILE 'STNGUIDE' ENTERED AT 11:05:57 ON 27 FEB 2006

FILE 'REGISTRY' ENTERED AT 11:07:05 ON 27 FEB 2006

L13 STRUCTURE UPLOADED
L14 0 S L13 SAM SSS SUB=L11
L15 6 S L13 FULL SSS SUB=L11
SAVE TEMP L15 KEY995STRD/A

FILE 'CAPLUS' ENTERED AT 11:09:00 ON 27 FEB 2006

L16 24 S L15

FILE 'STNGUIDE' ENTERED AT 11:09:17 ON 27 FEB 2006

FILE 'REGISTRY' ENTERED AT 11:10:50 ON 27 FEB 2006

L17 STRUCTURE UPLOADED
L18 9 S L17 SAM SSS SUB=L11
L19 141 S L17 FULL SSS SUB=L11
 SAVE TEMP L19 KEY995STRE/A

FILE 'CAPLUS' ENTERED AT 11:13:27 ON 27 FEB 2006

L20 214 S L19
L21 9 S L16 AND L20
L22 128 S L2
L23 24 S L4
L24 9 S L22 AND L23
L25 18 S L15/PREP
L26 121 S L19 (L) (RCT OR RGT OR RACT)/RL
L27 8 S L25 AND L26

FILE 'CASREACT' ENTERED AT 11:19:39 ON 27 FEB 2006

L28 1 S L19/RRT (L) L15/PRO

FILE 'REGISTRY' ENTERED AT 11:21:52 ON 27 FEB 2006

FILE 'STNGUIDE' ENTERED AT 11:22:52 ON 27 FEB 2006

FILE 'REGISTRY' ENTERED AT 11:25:02 ON 27 FEB 2006

 E C2BR2F2?/MF
L29 4 S C2BR2F2?/MF
 E C2CL2F2?/MF
L30 8 S C2CL2F2?/MF
 E C2BRCLF2?/MF
L31 6 S C2BRCLF2?/MF
L32 18 S L29-L31

FILE 'CAPLUS' ENTERED AT 11:28:59 ON 27 FEB 2006

L33 700 S L32
L34 2 S L27 AND L33
L35 316 S L32 (L) (RCT OR RGT OR RACT)/RL
L36 4 S L25 AND L35
L37 2 S L27 AND L36
L38 62 S TORTELLI V?/AU
L39 18 S CALINI P?/AU
L40 5 S MILLEFANTI S?/AU
L41 3 S L38 AND L39 AND L40
L42 7 S L38 AND L39-L40
L43 3 S L39 AND L40
L44 1 S L41-L43 AND (L27 OR L34 OR L36)

FILE 'CAPLUS' ENTERED AT 11:34:45 ON 27 FEB 2006

FILE 'REGISTRY' ENTERED AT 11:35:00 ON 27 FEB 2006

FILE 'CAPLUS' ENTERED AT 11:35:04 ON 27 FEB 2006

FILE 'REGISTRY' ENTERED AT 11:35:57 ON 27 FEB 2006

FILE 'CAPLUS' ENTERED AT 11:38:09 ON 27 FEB 2006

L45 7 S L41-L44

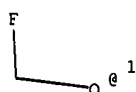
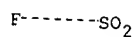
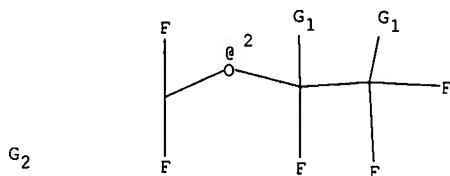
FILE 'CAPLUS' ENTERED AT 11:40:36 ON 27 FEB 2006

L46 9 S (L27 OR L34 OR L36) NOT L45

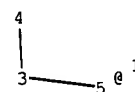
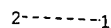
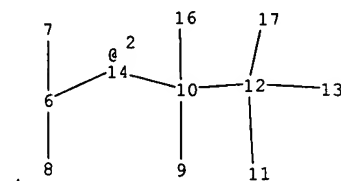
Keys 10/795995

02/27/2006

FILE 'CASREACT' ENTERED AT 11:42:52 ON 27 FEB 2006



22



chain nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 16 17 22

chain bonds :

1-2 3-4 3-5 6-7 6-8 6-14 9-10 10-12 10-14 10-16 11-12 12-13 12-17

exact/norm bonds :

1-2 3-5 6-14 10-14 10-16 12-17

exact bonds :

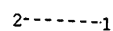
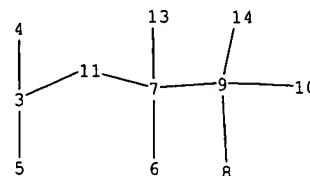
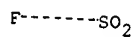
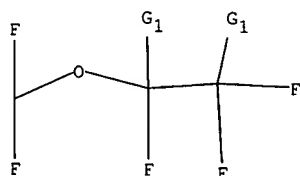
3-4 6-7 6-8 9-10 10-12 11-12 12-13

G1:Cl,Br

G2:[*1],[*2]

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS
 11:CLASS 12:CLASS 13:CLASS 14:CLASS 16:CLASS 17:CLASS 22:CLASS



chain nodes :

1 2 3 4 5 6 7 8 9 10 11 13 14

chain bonds :

1-2 3-4 3-5 3-11 6-7 7-9 7-11 7-13 8-9 9-10 9-14

exact/norm bonds :

1-2 3-11 7-11 7-13 9-14

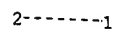
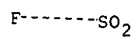
exact bonds :

3-4 3-5 6-7 7-9 8-9 9-10

G1:Cl,Br

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 13:CLASS 14:CLASS



chain nodes :

1 2 3 4 5

chain bonds :

1-2 3-4 3-5

exact/norm bonds :

1-2 3-5

exact bonds :

3-4

G1:Cl,Br

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS

=> file registry

FILE 'REGISTRY' ENTERED AT 11:35:57 ON 27 FEB 2006

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 26 FEB 2006 HIGHEST RN 875270-69-2

DICTIONARY FILE UPDATES: 26 FEB 2006 HIGHEST RN 875270-69-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

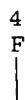
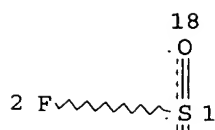
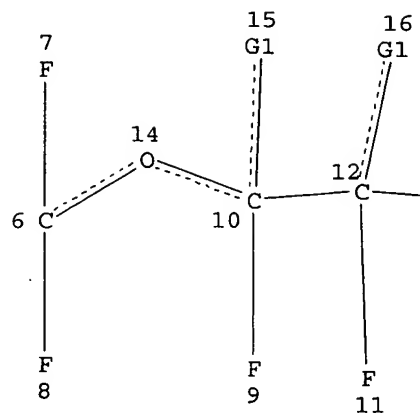
<http://www.cas.org/ONLINE/UG/regprops.html>

=> d stat que L15

L7 STR

Cl 20Br 21

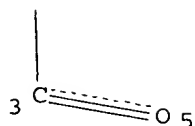
G2 17



Page 1-A

— F 13

Page 1-B



Page 2-A

VAR G1=20/21

VAR G2=5/14

NODE ATTRIBUTES:

NSPEC	IS	C	AT	1
NSPEC	IS	C	AT	2
NSPEC	IS	C	AT	3
NSPEC	IS	C	AT	4
NSPEC	IS	C	AT	5
NSPEC	IS	C	AT	6
NSPEC	IS	C	AT	7
NSPEC	IS	C	AT	8
NSPEC	IS	C	AT	9
NSPEC	IS	C	AT	10
NSPEC	IS	C	AT	11
NSPEC	IS	C	AT	12
NSPEC	IS	C	AT	13
NSPEC	IS	C	AT	14

NSPEC IS C AT 15
 NSPEC IS C AT 16
 NSPEC IS C AT 17
 NSPEC IS C AT 18
 NSPEC IS C AT 19

DEFAULT MLEVEL IS ATOM

MLEVEL IS CLASS AT 1 2 3 4 5 6 7 8 9 10 11 12 13 14 18 19 20
 21

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

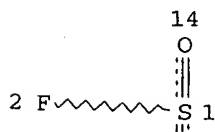
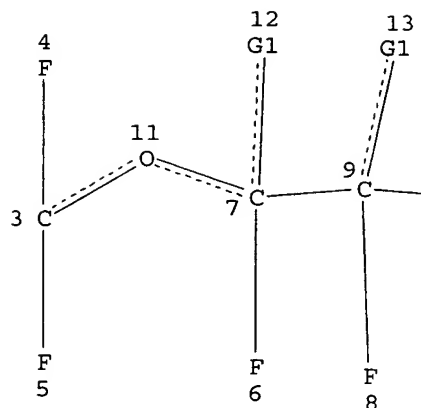
NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE

L11 147 SEA FILE=REGISTRY SSS FUL L7

L13 STR

Cl 16Br 17



Page 1-A

— F 10

Page 1-B

|||
 O
 15

Page 2-A

VAR G1=16/17

NODE ATTRIBUTES:

NSPEC	IS	C	AT	1
NSPEC	IS	C	AT	2
NSPEC	IS	C	AT	3
NSPEC	IS	C	AT	4
NSPEC	IS	C	AT	5
NSPEC	IS	C	AT	6
NSPEC	IS	C	AT	7
NSPEC	IS	C	AT	8
NSPEC	IS	C	AT	9
NSPEC	IS	C	AT	10
NSPEC	IS	C	AT	11
NSPEC	IS	C	AT	12
NSPEC	IS	C	AT	13
NSPEC	IS	C	AT	14
NSPEC	IS	C	AT	15

DEFAULT MLEVEL IS ATOM

MLEVEL IS CLASS AT 1 2 3 4 5 6 7 8 9 10 11 14 15 16 17

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

L15 6 SEA FILE=REGISTRY SUB=L11 SSS FUL L13

100.0% PROCESSED 12 ITERATIONS

6 ANSWERS

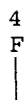
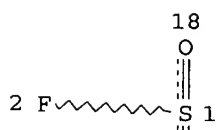
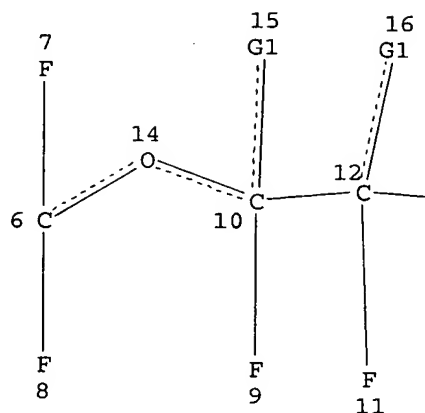
SEARCH TIME: 00.00.01

=> d stat que L19

L7 STR

Cl 20Br 21

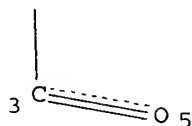
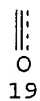
G2 17



Page 1-A

— F 13

Page 1-B



Page 2-A

VAR G1=20/21

VAR G2=5/14

NODE ATTRIBUTES:

NSPEC	IS	C	AT	1
NSPEC	IS	C	AT	2
NSPEC	IS	C	AT	3
NSPEC	IS	C	AT	4
NSPEC	IS	C	AT	5
NSPEC	IS	C	AT	6
NSPEC	IS	C	AT	7
NSPEC	IS	C	AT	8
NSPEC	IS	C	AT	9
NSPEC	IS	C	AT	10
NSPEC	IS	C	AT	11
NSPEC	IS	C	AT	12
NSPEC	IS	C	AT	13
NSPEC	IS	C	AT	14

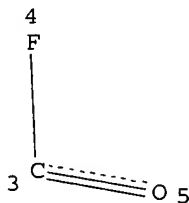
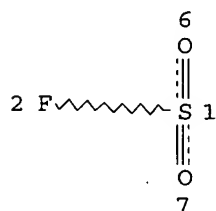
NSPEC IS C AT 15
 NSPEC IS C AT 16
 NSPEC IS C AT 17
 NSPEC IS C AT 18
 NSPEC IS C AT 19
 DEFAULT MLEVEL IS ATOM
 MLEVEL IS CLASS AT 1 2 3 4 5 6 7 8 9 10 11 12 13 14 18 19 20
 21
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE

L11 147 SEA FILE=REGISTRY SSS FUL L7
 L17 STR



NODE ATTRIBUTES:

NSPEC IS C AT 1
 NSPEC IS C AT 2
 NSPEC IS C AT 3
 NSPEC IS C AT 4
 NSPEC IS C AT 5
 NSPEC IS C AT 6
 NSPEC IS C AT 7
 DEFAULT MLEVEL IS ATOM
 MLEVEL IS CLASS AT 1 2 3 4 5 6 7
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE

L19 141 SEA FILE=REGISTRY SUB=L11 SSS FUL L17

100.0% PROCESSED 147 ITERATIONS
 SEARCH TIME: 00.00.01

141 ANSWERS

=> file caplus

FILE 'CAPLUS' ENTERED AT 11:38:09 ON 27 FEB 2006
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AUTHOR
 SEARCH

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FILE COVERS 1907 - 27 Feb 2006 VOL 144 ISS 10

FILE LAST UPDATED: 26 Feb 2006 (20060226/ED)

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<http://www.cas.org/infopolicy.html>

'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

=> d que nos L41

L38	62	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	TORTELLI V?/AU
L39	18	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	CALINI P?/AU
L40	5	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	MILLEFANTI S?/AU
L41	3	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L38 AND L39 AND L40

=> d que nos L42

L38	62	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	TORTELLI V?/AU
L39	18	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	CALINI P?/AU
L40	5	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	MILLEFANTI S?/AU
L42	7	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L38 AND (L39 OR L40)

=> d que nos L43

L39	18	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	CALINI P?/AU
L40	5	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	MILLEFANTI S?/AU
L43	3	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L39 AND L40

=> d que nos L44

L7		STR				
L11	147	SEA	FILE=REGISTRY	SSS	FUL	L7
L13		STR				
L15	6	SEA	FILE=REGISTRY	SUB=L11	SSS	FUL L13
L17		STR				
L19	141	SEA	FILE=REGISTRY	SUB=L11	SSS	FUL L17
L25	18	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L15/PREP
L26	121	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L19 (L) (RCT OR RGT OR RACT)/RL
L27	8	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L25 AND L26
L29	4	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	C2BR2F2/MF
L30	8	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	C2CL2F2/MF
L31	6	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	C2BRCLF2/MF
L32	18	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	(L29 OR L30 OR L31)
L33	700	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L32
L34	2	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L27 AND L33
L35	316	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L32 (L) (RCT OR RGT OR RACT)/RL
L36	4	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L25 AND L35
L38	62	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	TORTELLI V?/AU

L39 18 SEA FILE=CAPLUS ABB=ON PLU=ON CALINI P?/AU
 L40 5 SEA FILE=CAPLUS ABB=ON PLU=ON MILLEFANTI S?/AU
 L41 3 SEA FILE=CAPLUS ABB=ON PLU=ON L38 AND L39 AND L40
 L42 7 SEA FILE=CAPLUS ABB=ON PLU=ON L38 AND (L39 OR L40)
 L43 3 SEA FILE=CAPLUS ABB=ON PLU=ON L39 AND L40
 L44 1 SEA FILE=CAPLUS ABB=ON PLU=ON (L41 OR L42 OR L43) AND (L27
 OR L34 OR L36)

=> s L41-L44

L45 7 (L41 OR L42 OR L43 OR L44)

=> d ibib abs hitind hitstr L45 1-7

L45 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:731664 CAPLUS

DOCUMENT NUMBER: 143:172544

TITLE: Preparation of halofluoroethers

INVENTOR(S): Tortelli, Vito; Millefanti, Stefano
 ; Calini, Pierangelo

PATENT ASSIGNEE(S): Solvay Solexis S.P.A., Italy

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005213256	A2	20050811	JP 2005-21842	20050128
EP 1566374	A1	20050824	EP 2005-1389	20050125
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				

PRIORITY APPLN. INFO.: IT 2004-MI132 A 20040129

OTHER SOURCE(S): CASREACT 143:172544; MARPAT 143:172544

AB (R1)nCR'FmOCAFCA'F2 [I; A, A' = Cl, Br, H; m = 1, 2; n = 0, 1; R1 = F-substituted C1-20 alkyl, C3-7 cycloalkyl, C6-10 arylalkyl, C5-10 heterocyclyl, etc.; R' = (RI)pT; RI = F-substituted C1-20 alkylene, C3-7 cycloalkylene; p = 0, 1; T = C(R2)tFrOCAFCA'F2, C(O)(R2)n'Fu'; r = 1, 2; t, n', u' = 0, 1; R2 = same as R1] are prepared by reaction of (R1)nC(O)R'aFu [R1, n = same as I; u = 0, 1; R'a = (RI)pQ; RI, p = same as I; Q = C(O)(R2)n'Fu'; n', u', R2 = same as I] with F and ACF:CA'F2 (sic) (A, A' = same as above) at -120 to -20°, preferably -100 to -40°, in the presence of inert solvents. Dehalogenation or dehydrohalogenation of I gives fluorovinyl ether monomers for fluoropolymers. FCO(CF2)6COF was treated with F and CFC 1112 in CFCl3 at -40° to give ClCF2CFC10(CF2)7COF and ClCF2CFC10(CF2)8OCFC1CF2Cl with 47.7 and 5.6% selectivity, resp.

IC ICM C07C041-05

ICS C07C041-24; C07C043-12; C07C043-17

CC 23-9 (Aliphatic Compounds)

Section cross-reference(s): 35

L45 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:698418 CAPLUS

DOCUMENT NUMBER: 143:173611

TITLE: Process for preparing fluorohalogenethers

INVENTOR(S): Tortelli, Vito; Millefanti, Stefano
; Calini, Pierangelo
PATENT ASSIGNEE(S): Solvay Solexis S.P.A., Italy
SOURCE: U.S. Pat. Appl. Publ., 7 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005171388	A1	20050804	US 2005-44022	20050128
EP 1568676	A1	20050831	EP 2005-1390	20050125
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
JP 2005213255	A2	20050811	JP 2005-21839	20050128
PRIORITY APPLN. INFO.:			IT 2004-MI133	A 20040129

OTHER SOURCE(S): MARPAT 143:173611

AB A process for preparing (per)fluorohalogenethers having general formula: (R')nC(CFX1(CF2)z(CH2)z'OR)(F)mOCAFCA'F2; wherein: A,A' = Cl, Br,H; m = 1, 2; n = 0, 1; R' = Cl-3 (per)fluoroalkyl substituent; R = (per)fluoropolyether substituent; z, z' = 0, 1; X1 = F, CF3; by reaction of carbonyl compds. having formula: (R')nC(O)(F)q(CF2ORI); wherein q = 0, 1; RI = (per)fluoro-polyether substituent; in liquid phase, with elemental fluorine and with olefinic compds. of formula; CAF:CA'F2; at temps. from -120° C. to -20° C., preferably from -100° C. to -40° C.

IC ICM C07C041-16

INCL 568677000

CC 35-8 (Chemistry of Synthetic High Polymers)

L45 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:753175 CAPLUS

DOCUMENT NUMBER: 141:260266

TITLE: Process for preparing (per)fluorohalogen ethers by the reaction of acyl fluorides with halogenated 1,2-difluoroethylenes

INVENTOR(S): Tortelli, Vito; Calini, Pierangelo
; Millefanti, Stefano

PATENT ASSIGNEE(S): Solvay Solexis S.p.A., Italy

SOURCE: Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

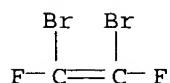
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

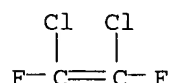
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1457484	A1	20040915	EP 2004-4344	20040226
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2004269535	A2	20040930	JP 2004-65994	20040309
US 2004199009	A1	20041007	US 2004-795995	20040310
CN 1539818	A	20041027	CN 2004-10033085	20040311
PRIORITY APPLN. INFO.:			IT 2003-MI444	A 20030311

OTHER SOURCE(S): CASREACT 141:260266; MARPAT 141:260266

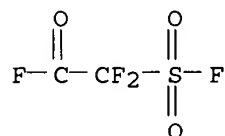
- AB A process for preparing (per)fluorohalogen ethers containing the sulfonyl fluoride group $\text{FSO}_2\text{RCF}_2\text{OCAFCAlF}_2$ [A, Al = Cl, Br; R = (per)fluorinated optionally containing one or more oxygen atoms] is described which comprises the reaction of acyl fluorides FSO_2RCOF in the liquid phase with elemental fluorine and with olefinic compds. CAF:CA1F at -120° to -20° , optionally in the presence of a solvent inert under the reaction conditions.
- IC ICM C07C303-22
ICS C07C309-82
- CC 23-12 (Aliphatic Compounds)
Section cross-reference(s): 45
- IT 76-15-3, cfc 115 359-21-7 598-88-9,
1,2-Dichloro-1,2-difluoroethylene 677-67-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(process for preparing (per)fluorohalogen ethers by the reaction of acyl fluorides with halogenated 1,2-difluoroethylenes)
- IT 144728-59-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(process for preparing (per)fluorohalogen ethers by the reaction of acyl fluorides with halogenated 1,2-difluoroethylenes)
- IT 359-21-7 598-88-9, 1,2-Dichloro-1,2-difluoroethylene 677-67-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(process for preparing (per)fluorohalogen ethers by the reaction of acyl fluorides with halogenated 1,2-difluoroethylenes)
- RN 359-21-7 CAPLUS
- CN Ethene, 1,2-dibromo-1,2-difluoro- (9CI) (CA INDEX NAME)



- RN 598-88-9 CAPLUS
- CN Ethene, 1,2-dichloro-1,2-difluoro- (9CI) (CA INDEX NAME)

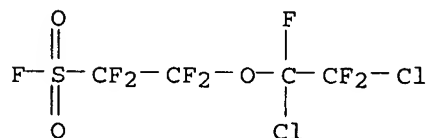


- RN 677-67-8 CAPLUS
- CN Acetyl fluoride, difluoro(fluorosulfonyl)- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



- IT 144728-59-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(process for preparing (per)fluorohalogen ethers by the reaction of acyl fluorides with halogenated 1,2-difluoroethylenes)

RN 144728-59-6 CAPLUS
 CN Ethanesulfonyl fluoride, 2-(1,2-dichloro-1,2,2-trifluoroethoxy)-1,1,2,2-tetrafluoro- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:680320 CAPLUS
 DOCUMENT NUMBER: 141:190507
 TITLE: Preparation of fluorohaloethyl ethers as intermediates for fluorovinyl ethers
 INVENTOR(S): Tortelli, Vito; Calini, Pierangelo
 PATENT ASSIGNEE(S): Solvay Solexis S.P.A., Italy
 SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004231657	A2	20040819	JP 2004-24100	20040130
EP 1454940	A2	20040908	EP 2004-1633	20040127
EP 1454940	A3	20050608		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CA 2456406	AA	20040730	CA 2004-2456406	20040129
US 2004186324	A1	20040923	US 2004-766215	20040129
PRIORITY APPLN. INFO.:			IT 2003-MI150	A 20030130

OTHER SOURCE(S): CASREACT 141:190507; MARPAT 141:190507
 AB R'CF2OCAFCA'F2 [A, A' = H, Cl, Br; A = A' ≠ H; R' = OR, RfT; R = (per)fluorinated C1-20 alkyl, C3-7 cycloalkyl, aromatic group, etc.; Rf = perfluorooxyalkylene; T = OCF2OCFACA'F2, OCF2X; X = F, CF3, Cl] are prepared by reaction of R''COF (R'' = RO, RfQ; Q = O2CF, OCF2X; R, Rf, X = same as above) with F and CAF:CA'F (A, A' = same as above) in liquid phases at -120 to -20°, preferably -100 to -40°, optionally in inert solvents. Q(CF2CF2O)t(CF2O)pCOF (Q = OCF3 or O2CF, p/t = 0.2, average mol. weight 476) was treated with CFC 112 and F at -100° to give T(CF2CF2O)t(CF2O)pCF2OCFClCF2Cl (T = OCF3, OCF2OCFClCF2Cl).
 IC ICM C07C041-24
 ICS C07C041-22; C07C043-12; C07C043-17
 CC 23-9 (Aliphatic Compounds)
 Section cross-reference(s): 35

L45 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:117245 CAPLUS
 DOCUMENT NUMBER: 140:165780
 TITLE: Process for preparing fluorohalogen ethers from perfluorocarbonyl compounds and alkenes and fluorine

INVENTOR(S): **Tortelli, Vito; Calini, Pierangelo**
 PATENT ASSIGNEE(S): **Solvay Solexis S.P.A., Italy**
 SOURCE: **Eur. Pat. Appl., 9 pp.**
 CODEN: EPXXDW
 DOCUMENT TYPE: **Patent**
 LANGUAGE: **English**
 FAMILY ACC. NUM. COUNT: **1**
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1388531	A1	20040211	EP 2003-17180	20030729
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2004067693	A2	20040304	JP 2003-286161	20030804
US 2004030146	A1	20040212	US 2003-633565	20030805
US 6835856	B2	20041228		
CN 1488616	A	20040414	CN 2003-158037	20030806
PRIORITY APPLN. INFO.:			IT 2002-MI1782	A 20020806
OTHER SOURCE(S): MARPAT 140:165780				
AB Fluorohalogen ethers (e.g., F3COCFC1CF2Cl) are prepared in high yield and selectivity from perfluorocarbonyl compds. [e.g., FC(:O)F] and alkenes (e.g., chloropentafluoroethane) and fluorine.				
IC ICM C07C041-01				
ICS C07C041-06; C07C043-12				
CC 45-4 (Industrial Organic Chemicals, Leather, Fats, and Waxes)				
Section cross-reference(s): 23				
REFERENCE COUNT:	6	THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT		

L45 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2002:866692 CAPLUS
 DOCUMENT NUMBER: 137:353529
 TITLE: Amorphous perfluorinated copolymers useful for optical applications particularly optical fibers
 INVENTOR(S): **Apostolo, Marco; Triulzi, Francesco; Arcella, Vincenzo; Tortelli, Vito; Calini, Pierangelo**
 PATENT ASSIGNEE(S): **Ausimont S.p.A., Italy**
 SOURCE: **Eur. Pat. Appl., 16 pp.**
 CODEN: EPXXDW
 DOCUMENT TYPE: **Patent**
 LANGUAGE: **English**
 FAMILY ACC. NUM. COUNT: **2**
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1256592	A1	20021113	EP 2002-9935	20020503
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2002177667	A1	20021128	US 2002-139645	20020507
US 6809166	B2	20041026		
JP 2003040938	A2	20030213	JP 2002-131704	20020507
US 2005009944	A1	20050113	US 2004-913539	20040809
US 6936668	B2	20050830		
PRIORITY APPLN. INFO.:			IT 2001-MI921	A 20010507
			IT 2002-MI833	A 20020419
			US 2002-139645	A3 20020507

AB The invention relates to amorphous perfluorinated copolymers comprising cyclic perfluorinated units deriving from at least two different perfluorinated comonomers, optionally with units deriving from a perfluorinated monomer containing at least one olefinic unsatn. (perfluoroolefin), or comprising cyclic perfluorinated units and units deriving from a perfluorinated monomer containing at least one olefinic unsatn., said perfluorinated copolymers having the following combination of properties: substantial absence of unstable polar end groups, polymer Tg higher than 120°, narrow monomeric composition distribution. Thus, a typical perfluorinated copolymer was obtained from 2,2,4-trifluoro-5-trifluoromethyl-1,3-dioxole and tetrafluoroethylene.

IC ICM C08F008-22
ICS G02B001-04

CC 35-4 (Chemistry of Synthetic High Polymers)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:866691 CAPLUS

DOCUMENT NUMBER: 137:353528

TITLE: Amorphous (per)fluorinated polymers for use in semiconductor devices

INVENTOR(S): Tortelli, Vito; Calini, Pierangelo

PATENT ASSIGNEE(S): Ausimont S.p.A., Italy

SOURCE: Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1256591	A1	20021113	EP 2002-9416	20020425
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2002348315	A2	20021204	JP 2002-130765	20020502
US 2002183459	A1	20021205	US 2002-136424	20020502
US 6828388	B2	20041207		
US 2005009944	A1	20050113	US 2004-913539	20040809
US 6936668	B2	20050830		
PRIORITY APPLN. INFO.:			IT 2001-MI921	A 20010507
			IT 2002-MI833	A 20020419
			US 2002-139645	A3 20020507

AB The invention relates to amorphous (per)fluorinated polymers containing <0.05 mmol/kg-polymer of each of the following unstable ionic end groups: COF, COOH, their amidic derivs., esters or salts as determined by IR spectroscopy using Nicolet Nexus FT-IR equipment (256 scannings, resolution 2 cm⁻¹). The polymers have a high transparency at wave lengths from 150 to 250 nm. Therefore said polymers are useful for achieving protective films in the production of semiconductors by means of microlithog. techniques at 248 nm, 193 nm and 157 nm. An object of the present invention is a process for preparing the amorphous (per)fluorinated polymers with low content or substantially free from ionic end group, by treatment with elementary fluorine, optionally in admixt. with inert gases, in a solvent inert to fluorination, in the presence of UV radiations having wave length from 200 to 500 nm, operating at temps. lower than 100°.

IC ICM C08F008-22
ICS G02B001-04

CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 76

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L11 147 SEA FILE=REGISTRY SSS FUL L7
L13 STR
L15 6 SEA FILE=REGISTRY SUB=L11 SSS FUL L13
L17 STR
L19 141 SEA FILE=REGISTRY SUB=L11 SSS FUL L17
L25 18 SEA FILE=CAPLUS ABB=ON PLU=ON L15/PREP
L26 121 SEA FILE=CAPLUS ABB=ON PLU=ON L19 (L) (RCT OR RGT OR
RACT)/RL
L27 8 SEA FILE=CAPLUS ABB=ON PLU=ON L25 AND L26

=> d que nos L34

L7 STR
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L13 STR
L15 6 SEA FILE=REGISTRY SUB=L11 SSS FUL L13
L17 STR
L19 141 SEA FILE=REGISTRY SUB=L11 SSS FUL L17
L25 18 SEA FILE=CAPLUS ABB=ON PLU=ON L15/PREP
L26 121 SEA FILE=CAPLUS ABB=ON PLU=ON L19 (L) (RCT OR RGT OR
RACT)/RL
L27 8 SEA FILE=CAPLUS ABB=ON PLU=ON L25 AND L26
L29 4 SEA FILE=REGISTRY ABB=ON PLU=ON C2BR2F2/MF
L30 8 SEA FILE=REGISTRY ABB=ON PLU=ON C2CL2F2/MF
L31 6 SEA FILE=REGISTRY ABB=ON PLU=ON C2BRCLF2/MF

L32 18 SEA FILE=REGISTRY ABB=ON PLU=ON (L29 OR L30 OR L31)
 L33 700 SEA FILE=CAPLUS ABB=ON PLU=ON L32
 L34 2 SEA FILE=CAPLUS ABB=ON PLU=ON L27 AND L33

=> d que nos L36

L7 STR
 L11 147 SEA FILE=REGISTRY SSS FUL L7
 L13 STR
 L15 6 SEA FILE=REGISTRY SUB=L11 SSS FUL L13
 L25 18 SEA FILE=CAPLUS ABB=ON PLU=ON L15/PREP
 L29 4 SEA FILE=REGISTRY ABB=ON PLU=ON C2BR2F2/MF
 L30 8 SEA FILE=REGISTRY ABB=ON PLU=ON C2CL2F2/MF
 L31 6 SEA FILE=REGISTRY ABB=ON PLU=ON C2BRCLF2/MF
 L32 18 SEA FILE=REGISTRY ABB=ON PLU=ON (L29 OR L30 OR L31)
 L35 316 SEA FILE=CAPLUS ABB=ON PLU=ON L32 (L) (RCT OR RGT OR
 RACT)/RL
 L36 4 SEA FILE=CAPLUS ABB=ON PLU=ON L25 AND L35

=> s (L27 or L34 or L36) not L45

L46 9 (L27 OR L34 OR L36) NOT L45

printed with author search

=> d ibib abs hitind hitstr L46 1-9

L46 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:668857 CAPLUS

DOCUMENT NUMBER: 142:59591

TITLE: Synthesis of 3,6-dioxa- Δ 7-4-trifluoromethyl
 perfluorooctyl trifluoromethyl sulfonimide:
 bis[(perfluoroalkyl)sulfonyl] superacid monomer and
 polymer

AUTHOR(S): Thomas, Brian H.; Shafer, Gregory; Ma, Jing Ji; Tu,
 Ming-Hu; DesMarteau, Darryl D.

CORPORATE SOURCE: H.L. Hunter Hall Chemistry Laboratory, Chemistry
 Department, Clemson University, Clemson, SC,
 29634-1905, USA

SOURCE: Journal of Fluorine Chemistry (2004), 125(8),
 1231-1240

CODEN: JFLCAR; ISSN: 0022-1139

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A new type of ion exchange polymer, bis[(perfluoroalkyl)sulfonyl]imide
 ionomers (PFSI), were developed by the copolymn. of sodium
 3,6-dioxa- Δ 7-4-trifluoromethyl perfluorooctyl trifluoromethyl
 sulfonimide with tetrafluoroethylene (TFE) using an aqueous redox initiation
 system in an emulsion type polymerization These polymers were prepared in
 various
 equivalent wts. and processed into functional membranes. The new ionomers
 exhibit excellent chemical and thermal stability. The materials have high
 potential for electrochem. applications especially as solid polymer
 electrolytes

(SPE) in proton exchange membrane (PEM) fuel cells.

CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)

Section cross-reference(s): 35, 38

IT 677-67-8P, Fluorosulfonyldifluoroacetyl fluoride

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PUR
 (Purification or recovery); PYP (Physical process); RCT (Reactant)

; SPN (Synthetic preparation); PREP (Preparation); PROC (Process);
RACT (Reactant or reagent)

(compound 4; synthesis of 3,6-dioxa-Δ⁷-4-trifluoromethyl
 perfluorooctyl trifluoromethyl sulfonimide,
 bis[(perfluoroalkyl)sulfonyl] superacid monomer and polymer)

IT **64346-22-1P 78010-39-6P**

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PUR
 (Purification or recovery); PYP (Physical process); **RCT (Reactant)**
 ; SPN (Synthetic preparation); **PREP (Preparation)**; PROC
 (Process); **RACT (Reactant or reagent)**

(compound 9; synthesis of 3,6-dioxa-Δ⁷-4-trifluoromethyl
 perfluorooctyl trifluoromethyl sulfonimide,
 bis[(perfluoroalkyl)sulfonyl] superacid monomer and polymer)

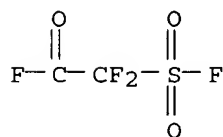
IT **677-67-8P**, Fluorosulfonyldifluoroacetyl fluoride

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PUR
 (Purification or recovery); PYP (Physical process); **RCT (Reactant)**
 ; SPN (Synthetic preparation); PREP (Preparation); PROC (Process);
RACT (Reactant or reagent)

(compound 4; synthesis of 3,6-dioxa-Δ⁷-4-trifluoromethyl
 perfluorooctyl trifluoromethyl sulfonimide,
 bis[(perfluoroalkyl)sulfonyl] superacid monomer and polymer)

RN **677-67-8 CAPLUS**

CN Acetyl fluoride, difluoro(fluorosulfonyl)- (6CI, 7CI, 8CI, 9CI) (CA INDEX
 NAME)



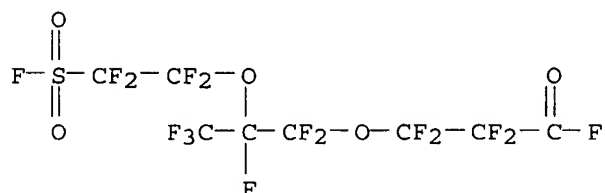
IT **64346-22-1P 78010-39-6P**

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PUR
 (Purification or recovery); PYP (Physical process); **RCT (Reactant)**
 ; SPN (Synthetic preparation); **PREP (Preparation)**; PROC
 (Process); **RACT (Reactant or reagent)**

(compound 9; synthesis of 3,6-dioxa-Δ⁷-4-trifluoromethyl
 perfluorooctyl trifluoromethyl sulfonimide,
 bis[(perfluoroalkyl)sulfonyl] superacid monomer and polymer)

RN **64346-22-1 CAPLUS**

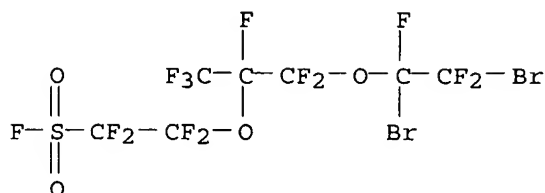
CN Propanoyl fluoride, 2,2,3,3-tetrafluoro-3-[1,1,2,3,3,3-hexafluoro-2-
 [1,1,2,2-tetrafluoro-2-(fluorosulfonyl)ethoxy]propoxy]- (9CI) (CA INDEX
 NAME)



RN **78010-39-6 CAPLUS**

CN Ethanesulfonyl fluoride, 2-[1-[(1,2-dibromo-1,2,2-
 trifluoroethoxy)difluoromethyl]-1,2,2,2-tetrafluoroethoxy]-1,1,2,2-

tetrafluoro- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

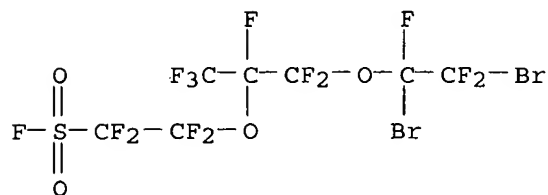
L46 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:289553 CAPLUS
 DOCUMENT NUMBER: 140:321901
 TITLE: Unsaturated fluorohydrocarbyl fluoroalkylsulfonates as substitutes for unsaturated fluoroalkylsulfonyl fluorides, and their manufacture
 INVENTOR(S): Uematsu, Nobuyuki; Hoshi, Nobuto; Koga, Takehiro; Gronvald, Oliver; Ikeda, Masanori
 PATENT ASSIGNEE(S): Asahi Kasei Corporation, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004107313	A2	20040408	JP 2002-350246	20021202
PRIORITY APPLN. INFO.:			JP 2002-215050	A 20020724
OTHER SOURCE(S): MARPAT 140:321901				
AB The fluorosulfonates, useful as monomers for separators for fuel cells and electrolysis of NaCl, etc., are CF ₂ :CF[OCF ₂ CF(CF ₃)] _n O(CF ₂) _m SO ₃ Rf (I; Rf = fluorohydrocarbyl, m = 1-5; n = 0-2). Thus, CF ₂ :CFOCF ₂ CF ₂ SO ₃ H was treated with CH ₂ :CF ₂ to give I (Rf = CF ₂ Me, m = 2, n = 0).				
IC ICM C07C309-10 ICS C07C303-28; C08F016-30				
CC 35-2 (Chemistry of Synthetic High Polymers) Section cross-reference(s): 23, 52, 72				
IT 78010-39-6P 111173-24-1P 677315-21-8P 677315-22-9P 677315-24-1P 677315-25-2P 677315-27-4P 677315-28-5P 677315-31-0P 677315-32-1P 677315-33-2P 677315-34-3P				
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (manufacture of unsatd. fluorohydrocarbyl fluoroalkylsulfonates as monomers for separators for fuel cells and electrolysis of NaCl)				
IT 75-38-7, Vinylidene fluoride 75-89-8, 2,2,2-Trifluoroethanol 76-37-9 920-66-1 4089-57-0 16090-14-5 26953-98-0				
RL: RCT (Reactant); RACT (Reactant or reagent) (manufacture of unsatd. fluorohydrocarbyl fluoroalkylsulfonates as monomers for separators for fuel cells and electrolysis of NaCl)				
IT 78010-39-6P RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)				

(manufacture of unsatd. fluorohydrocarbyl fluoroalkylsulfonates as monomers for separators for fuel cells and electrolysis of NaCl)

RN 78010-39-6 CAPLUS

CN Ethanesulfonyl fluoride, 2-[1-[(1,2-dibromo-1,2,2-trifluoroethoxy)difluoromethyl]-1,2,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoro- (9CI) (CA INDEX NAME)



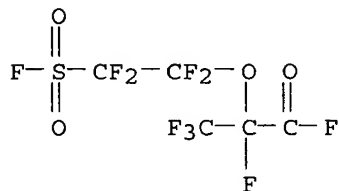
IT 4089-57-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(manufacture of unsatd. fluorohydrocarbyl fluoroalkylsulfonates as monomers for separators for fuel cells and electrolysis of NaCl)

RN 4089-57-0 CAPLUS

CN Propanoyl fluoride, 2,3,3,3-tetrafluoro-2-[1,1,2,2-tetrafluoro-2-(fluorosulfonyl)ethoxy]- (9CI) (CA INDEX NAME)



L46 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:52798 CAPLUS

DOCUMENT NUMBER: 140:111029

TITLE: Preparation of fluorine-containing fluorosulfonylalkyl vinyl ether

INVENTOR(S): Mangai, Akiya; Otsuka, Tatsuya; Ichihara, Kazuyoshi; Sugiyama, Akihira

PATENT ASSIGNEE(S): Daikin Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

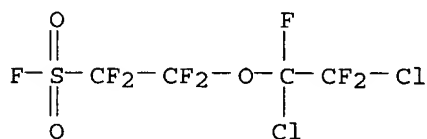
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004018429	A2	20040122	JP 2002-173695	20020614
PRIORITY APPLN. INFO.:			JP 2002-173695	20020614
OTHER SOURCE(S):		MARPAT 140:111029		

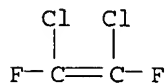
AB CF₂:CFOCF₂CF₂SO₂F (I), useful as a material for ion exchange membranes, is prepared by (i) treating CFCl:CFCl with MOCF₂CF₂SO₂F (M = alkali metal) and I₂ or Br₂, (ii) treating the resulting XCFC₁CFClOCF₂CF₂SO₂F (II; X = I,

Br) with F₂, and (iii) dechlorinating the resulting ClCF₂CFClOCF₂CF₂SO₂F (III). β-Sultone was continuously fed to a mixture of MeCN and Clocat F (KF) at 20° over 1 h and the reaction mixture was further stirred for 60 min. The reaction mixture was autoclaved with I₂ and CFCl:CFCl at 50° for 12 h to give 60% II (X = iodine), which was continuously fed to a reactor containing perfluorohexane under reflux at 57° while feeding F (diluted with N) for 11 h to give III at 90% selectivity and 95% conversion. III was added dropwise to a mixture of Zn, N-methyl-2-pyrrolidinone, and Br at ≤35° and the reaction mixture was further heated to 125° over 2 h to give I at overall yield 80%.

IC ICM C07C303-22
ICS C07C309-82
CC 23-9 (Aliphatic Compounds)
IT 81439-24-9P **144728-59-6P** 647828-20-4P
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); **PREP (Preparation)**; RACT (Reactant or reagent)
(preparation of perfluoro(fluorosulfonylethyl vinyl ether) from CFCl:CFCl)
IT **598-88-9**, 1,2-Dichloro-1,2-difluoroethylene
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of perfluoro(fluorosulfonylethyl vinyl ether) from CFCl:CFCl)
IT **144728-59-6P**
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); **PREP (Preparation)**; RACT (Reactant or reagent)
(preparation of perfluoro(fluorosulfonylethyl vinyl ether) from CFCl:CFCl)
RN 144728-59-6 CAPLUS
CN Ethanesulfonyl fluoride, 2-(1,2-dichloro-1,2,2-trifluoroethoxy)-1,1,2,2-tetrafluoro- (9CI) (CA INDEX NAME)



IT **598-88-9**, 1,2-Dichloro-1,2-difluoroethylene
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of perfluoro(fluorosulfonylethyl vinyl ether) from CFCl:CFCl)
RN **598-88-9** CAPLUS
CN Ethene, 1,2-dichloro-1,2-difluoro- (9CI) (CA INDEX NAME)



L46 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:163674 CAPLUS
DOCUMENT NUMBER: 138:169855
TITLE: Process for the synthesis of perfluorosulfonylalkyl hypofluorites
INVENTOR(S): Navarrini, Walter
PATENT ASSIGNEE(S): Ausimont S.p.A., Italy
SOURCE: Ital. Appl., 25 pp.
CODEN: ITXXCZ
DOCUMENT TYPE: Patent

LANGUAGE: Italian
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IT 2000MI1846	A1	20020208	IT 2000-MI1846	20000808
IT 1318672	B1	20030827		

PRIORITY APPLN. INFO.: IT 2000-MI1846 20000808
 OTHER SOURCE(S): CASREACT 138:169855; MARPAT 138:169855

AB Hypofluorites FSO₂-Rf-CF₂OF [Rf = CF₂, CF₂CF₂, CF(CF₃), CF₂CF₂OCF(CF₃)] were prepared by fluorination of acyl fluorides FSO₂-Rf-COF or corresponding sultones [when Rf = CF₂, OCF(CF₃)] over a supported CsF or KF catalyst. Thus, fluorination of perfluoropropene sultone (2 mmol) with 4 mmol F₂ over a CsF/NaF catalyst (1 h at 200 mbar and room temperature) yielded FSO₂CF(CF₃)CF₂OF which reacted with 8 mmol CFCl:CFCl to afford 53% FSO₂CF(CF₃)CF₂OCFClCF₂Cl.

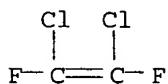
IC ICM C07C309-78
 CC 23-11 (Aliphatic Compounds)

IT 74-85-1, Ethylene, reactions 75-01-4, Chloroethylene, reactions 79-38-9, 2 Chloro 1 1 2 trifluoroethylene 540-59-0, 1 2 Dichloroethylene 598-88-9, 1 2 Dichloro 1 2 difluoroethylene 677-67-8 697-18-7 773-15-9 89413-95-6 89413-97-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of perfluorosulfonylalkyl hypofluorites from perfluorosulfonylalkanoyl fluorides)

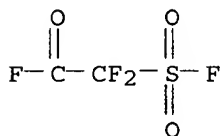
IT 115784-53-7P 144728-64-3P 496922-45-3P 496922-46-4P 496922-47-5P 496922-48-6P 496922-49-7P 496922-50-0P 496922-51-1P 496922-52-2P 496922-54-4P 496922-55-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of perfluorosulfonylalkyl hypofluorites from perfluorosulfonylalkanoyl fluorides)

IT 598-88-9, 1 2 Dichloro 1 2 difluoroethylene 677-67-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of perfluorosulfonylalkyl hypofluorites from perfluorosulfonylalkanoyl fluorides)

RN 598-88-9 CAPLUS
 CN Ethene, 1,2-dichloro-1,2-difluoro- (9CI) (CA INDEX NAME)



RN 677-67-8 CAPLUS
 CN Acetyl fluoride, difluoro(fluorosulfonyl)- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

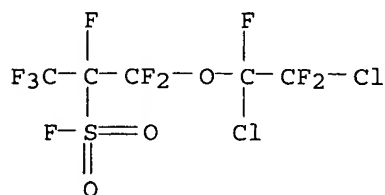


IT 144728-64-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of perfluorosulfonylalkyl hypofluorites from
perfluorosulfonylalkanoyl fluorides)

RN 144728-64-3 CAPLUS

CN 2-Propanesulfonyl fluoride, 1-(1,2-dichloro-1,2,2-trifluoroethoxy)-
1,1,2,3,3,3-hexafluoro- (9CI) (CA INDEX NAME)



L46 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:615562 CAPLUS

DOCUMENT NUMBER: 137:169968

TITLE: Manufacture of perfluorovinyl ether monomer having
sulfonamide group and its use for solid electrolyte
membrane

INVENTOR(S): Ikeda, Masanori; Hoshi, Nobuto; Uematsu, Nobuyuki;
Koga, Takehiro

PATENT ASSIGNEE(S): Asahi Kasei Kabushiki Kaisha, Japan

SOURCE: PCT Int. Appl., 215 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

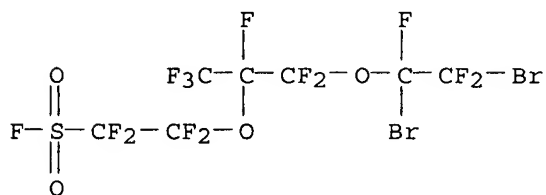
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

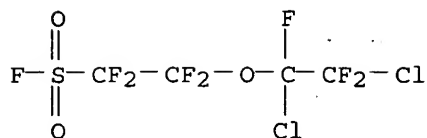
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002062749	A1	20020815	WO 2002-JP854	20020201
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1359142	A1	20031105	EP 2002-711282	20020201
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
CN 1500075	A	20040526	CN 2002-807780	20020201
US 2004122256	A1	20040624	US 2003-470802	20030801
PRIORITY APPLN. INFO.:			JP 2001-25018	A 20010201
			JP 2001-30955	A 20010207
			JP 2001-278418	A 20010913
			JP 2001-342172	A 20011107
			JP 2001-343780	A 20011108
			JP 2001-343931	A 20011108
			WO 2002-JP854	W 20020201

OTHER SOURCE(S): MARPAT 137:169968

- AB A perfluorovinyl ether monomer represented by $\text{CF}_2\text{CF}(\text{OCF}_2\text{CFCF}_3)_m\text{O}(\text{CF}_2)_n\text{SO}_2\text{NR}_1\text{R}_2$ (wherein $m = 0-5$ integer; $n = 1-5$ integer; $\text{R}_1, \text{R}_2 = \text{H}, \text{C}_1-10$ (un)substituted hydrocarbyl, substituted silyl; R_1 and R_2 may be bonded to each other to form a ring) and its polymers are prepared and the polymer films are used as solid electrolyte membrane. Neutralization of $\text{CF}_3\text{CF}(\text{COF})\text{OCF}_2\text{CF}_2\text{SO}_3\text{F}$ with Na_2CO_3 , amidation with diethylamine and $n\text{-BuLi}$, and decarboxylation gave $\text{CF}_2:\text{CFOCF}_2\text{CF}_2\text{SO}_3\text{NEt}_2$. Copolymer of this monomer with tetrafluoroethylene and press molding at 250° gave a membrane useful for solid electrolyte.
- IC ICM C07C311-24
ICS C07C303-36; C07F007-12; C08F214-26; C08F216-14; H01M008-02
- CC 35-2 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 38, 52
- IT 75549-02-9P 75718-06-8P 78010-39-6P 144728-59-6P
445293-56-1P 445293-57-2P 445293-58-3P 445293-59-4P 445293-60-7P
445293-61-8P 446312-49-8P 446312-51-2P 446312-52-3P 446312-53-4P
446312-54-5P 446312-55-6P 446312-56-7P 446312-57-8P 446312-58-9P
446312-59-0P 446312-61-4P 446312-62-5P 446312-63-6P 446312-65-8P
446312-68-1P 446312-69-2P 446312-70-5P 446312-71-6P 446312-72-7P
446312-75-0P
RL: IMF (Industrial manufacture); RCT (Reactant); **PREP**
(Preparation); RACT (Reactant or reagent)
(manufacture of perfluorovinyl ether monomer having sulfonamide group for preparation of solid electrolyte membrane)
- IT 62-53-3, Aniline, reactions 75-64-9, tert-Butylamine, reactions 109-89-7, Diethylamine, reactions 109-97-7, Pyrrole 124-40-3, Dimethylamine, reactions 288-32-4, Imidazole, reactions 999-97-3, Hexamethyldisilazane 1070-89-9, Sodium hexamethyldisilazide 4089-57-0 4089-58-1 29514-94-1 77545-08-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(manufacture of perfluorovinyl ether monomer having sulfonamide group for preparation of solid electrolyte membrane)
- IT 78010-39-6P 144728-59-6P
RL: IMF (Industrial manufacture); RCT (Reactant); **PREP**
(Preparation); RACT (Reactant or reagent)
(manufacture of perfluorovinyl ether monomer having sulfonamide group for preparation of solid electrolyte membrane)
- RN 78010-39-6 CAPLUS
- CN Ethanesulfonyl fluoride, 2-[1-[(1,2-dibromo-1,2,2-trifluoroethoxy)difluoromethyl]-1,2,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoro- (9CI) (CA INDEX NAME)



- RN 144728-59-6 CAPLUS
- CN Ethanesulfonyl fluoride, 2-(1,2-dichloro-1,2,2-trifluoroethoxy)-1,1,2,2-tetrafluoro- (9CI) (CA INDEX NAME)



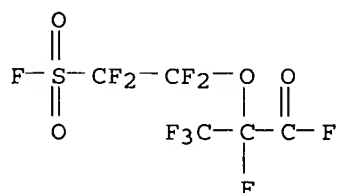
IT 4089-57-0 4089-58-1 77545-08-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(manufacture of perfluorovinyl ether monomer having sulfonamide group for preparation of solid electrolyte membrane)

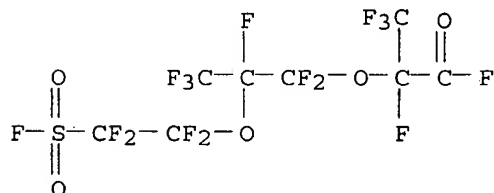
RN 4089-57-0 CAPLUS

CN Propanoyl fluoride, 2,3,3,3-tetrafluoro-2-[1,1,2,2-tetrafluoro-2-(fluorosulfonyl)ethoxy]- (9CI) (CA INDEX NAME)



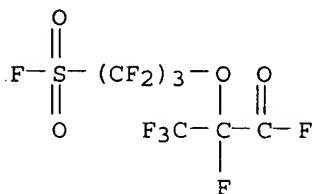
RN 4089-58-1 CAPLUS

CN Propanoyl fluoride, 2,3,3,3-tetrafluoro-2-[1,1,2,3,3,3-hexafluoro-2-[1,1,2,2-tetrafluoro-2-(fluorosulfonyl)ethoxy]propoxy]- (9CI) (CA INDEX NAME)



RN 77545-08-5 CAPLUS

CN Propanoyl fluoride, 2,3,3,3-tetrafluoro-2-[1,1,2,2,3,3-hexafluoro-3-(fluorosulfonyl)propoxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:607663 CAPLUS

DOCUMENT NUMBER: 137:155315
 TITLE: One-step manufacture of sulfonic acid group-containing fluoropolymers
 INVENTOR(S): Koga, Takehiro; Hoshi, Nobuto; Ikeda, Masanori
 PATENT ASSIGNEE(S): Asahi Kasei Corporation, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002226514	A2	20020814	JP 2001-30967	20010207
PRIORITY APPLN. INFO.:			JP 2001-30967	20010207

AB The fluoropolymers, useful for fuel cell electrolytes, are manufactured by acid treatment of polymers having repeating units $\text{CF}_2\text{CF}[(\text{OCF}_2\text{CFCF}_3)_m\text{O}(\text{CF}_2)_n\text{SO}_2\text{NR}_1\text{R}_2]$ ($\text{R}_1, 2 = \text{H, alkyl, aryl, aralkyl, silyl}$; $\text{R}_1\text{-R}_2$ may form ring; $m = 0, 1$; $n = 2, 3$). Sulfonamide groups-containing fluoropolymers, having repeating units $\text{CF}_2\text{CF}[\text{O}(\text{CF}_2)_n\text{SO}_2\text{NRR}_2]$ ($\text{R}_1, 2, m, n = \text{same as above}$), are also claimed. Thus, a fluoropolymer film having a unit $\text{CF}_2\text{CF}[\text{OCF}_2\text{CF}(\text{CF}_3)\text{OCF}_2\text{CF}_2\text{SO}_2\text{Net}_2]$, showing good antiblocking properties, was immersed in 3N H_2SO_4 at 130° for 1.5 h to convert SO_2Net_2 to SO_3H .

IC ICM C08F008-12
 ICS C08F016-30; H01M008-02

CC 35-8 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 52

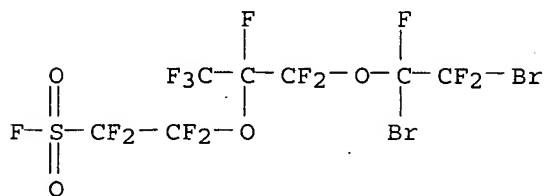
IT **78010-39-6P** 445293-56-1P 445293-59-4P 445293-60-7P
 RL: IMF (Industrial manufacture); RCT (Reactant); **PREP**
(Preparation); RACT (Reactant or reagent)
 (one-step manufacture of sulfonic acid group-containing fluoropolymers by acid hydrolysis of sulfonamide group-containing precursors)

IT **4089-57-0**
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (one-step manufacture of sulfonic acid group-containing fluoropolymers by acid hydrolysis of sulfonamide group-containing precursors)

IT **78010-39-6P**
 RL: IMF (Industrial manufacture); RCT (Reactant); **PREP**
(Preparation); RACT (Reactant or reagent)
 (one-step manufacture of sulfonic acid group-containing fluoropolymers by acid hydrolysis of sulfonamide group-containing precursors)

RN 78010-39-6 CAPLUS

CN Ethanesulfonyl fluoride, 2-[1-[(1,2-dibromo-1,2,2-trifluoroethoxy)difluoromethyl]-1,2,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoro- (9CI) (CA INDEX NAME)



IT 4089-57-0

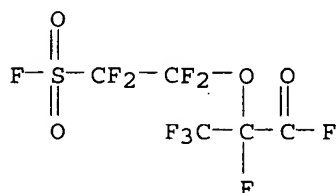
RL: RCT (Reactant); RACT (Reactant or reagent)

acid (one-step manufacture of sulfonic acid group-containing fluoropolymers by

hydrolysis of sulfonamide group-containing precursors)

RN 4089-57-0 CAPLUS

CN Propanoyl fluoride, 2,3,3,3-tetrafluoro-2-[1,1,2,2-tetrafluoro-2-(fluorosulfonyl)ethoxy]- (9CI) (CA INDEX NAME)



L46 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1993:21927 CAPLUS

DOCUMENT NUMBER: 118:21927

TITLE: Novel routes to fluorinated ethers containing a fluorosulfonyl group

AUTHOR(S): Storzer, Werner; DesMarteau, Darryl D.

CORPORATE SOURCE: H. L. Hunter Chem. Lab., Clemson Univ., Clemson, SC, 29634-1905, USA

SOURCE: Journal of Fluorine Chemistry (1992), 58(1), 59-69
CODEN: JFLCAR; ISSN: 0022-1139

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 118:21927

AB The chloroxy compds. ClOCF₂CFXSO₂F (X = F, CF₃) have been reacted with several simple olefins, e.g., CHF:CHF, to give ethers, e.g., ClCHFCHFOCF₂CF₂SO₂F. In the case of unsym. olefins the reaction mainly follows an electrophilic cis addition with the pos. polarized chlorine adding in a Markovnikov manner.

CC 23-12 (Aliphatic Compounds)

IT 22675-67-8P 73605-98-8P 73606-00-5P 73606-02-7P 73606-04-9P
 73606-06-1P 83865-25-2P 85720-80-5P 95616-32-3P 144728-56-3P
 144728-57-4P 144728-58-5P **144728-59-6P** 144728-60-9P
 144728-61-0P 144728-62-1P 144728-63-2P **144728-64-3P**
 144728-65-4P 144728-66-5P 144978-10-9P 144978-11-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

IT 75-02-5, Fluoroethylene 75-38-7, 1,1-Difluoroethene 79-38-9 116-15-4
311-81-9 359-11-5 **381-71-5** 1630-77-9

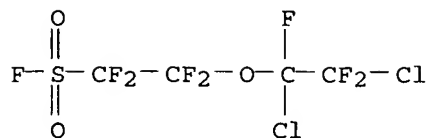
RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with chloroxyhaloalkanesulfonyl fluorides)

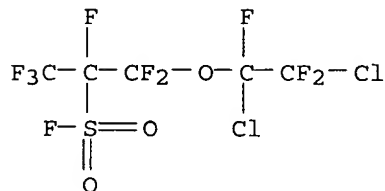
IT **144728-59-6P** **144728-64-3P**RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 144728-59-6 CAPLUS

CN Ethanesulfonyl fluoride, 2-(1,2-dichloro-1,2,2-trifluoroethoxy)-1,1,2,2-tetrafluoro- (9CI) (CA INDEX NAME)



RN 144728-64-3 CAPLUS

CN 2-Propanesulfonyl fluoride, 1-(1,2-dichloro-1,2,2-trifluoroethoxy)-
1,1,2,3,3,3-hexafluoro- (9CI) (CA INDEX NAME)

IT 311-81-9 381-71-5

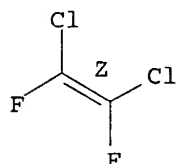
RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with chloroxyhaloalkanesulfonyl fluorides)

RN 311-81-9 CAPLUS

CN Ethene, 1,2-dichloro-1,2-difluoro-, (1Z)- (9CI) (CA INDEX NAME)

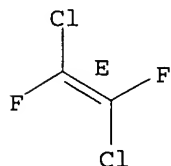
Double bond geometry as shown.



RN 381-71-5 CAPLUS

CN Ethene, 1,2-dichloro-1,2-difluoro-, (1E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L46 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1982:617423 CAPLUS

DOCUMENT NUMBER: 97:217423

TITLE: Solutions of sulfonyl fluorides and fluoropolymers

INVENTOR(S): Silva, Raimund H.; Resnick, Paul R.; Smith, Roger A.

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA

SOURCE: U.S., 10 pp. Cont.-in-part of U.S. Ser. No. 79,173,
abandoned.

DOCUMENT TYPE: CODEN: USXXAM
 LANGUAGE: Patent
 FAMILY ACC. NUM. COUNT: English
 3
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4348310	A	19820907	US 1980-176595	19800808
JP 56050947	A2	19810508	JP 1980-131781	19800924
FR 2465753	A1	19810327	FR 1980-20590	19800925
FR 2465753	B1	19840427		
GB 2066824	A	19810715	GB 1980-30900	19800925
GB 2066824	B2	19830824		
US 4414280	A	19831108	US 1981-327062	19811203
US 4446269	A	19840501	US 1982-354194	19820303
PRIORITY APPLN. INFO..			US 1979-79173	A2 19790926
			US 1980-176595	A 19800808

OTHER SOURCE(S): MARPAT 97:217423

AB Solvents for fluoropolymers useful in casting reverse osmosis membranes have the composition $\text{CF}_2\text{XCFXO}[\text{CF}_2\text{C}(\text{CF}_3)\text{FO}]_n(\text{CF}_2)_m\text{Y}$ (X = halogen; n = 0, 1; m = 1-3; Y = CO_2Me , SO_2F). Thus, 3276.1 g perfluoro[2-(2-fluorosulfonylethoxy)propyl vinyl ether] [16090-14-5] was chlorinated to give 2533.8g perfluoro[2-(2-fluorosulfonylethoxy)propyl-1,2-dichloroethyl ether] (I) [68860-43-5]. perfluoro[2-(2-fluorosulfonylethoxy-2-trifluoromethylethyl)]vinyl ether-tetrafluoroethylene copolymer [26654-97-7] (2 G) was dissolved in 45 g I, and 5 mL solution was cast to give a film which was dried at $80^\circ/300$ mm. The film was hydrolyzed with 28% NaOH at 80° to give a membrane which was tested in 0.3% NaCl in a hyperfiltration cell. The water flux d. at 5700 KPa was $1.872 + 10^{-6}$ m/s, and the salt rejection was 82.6%.

IC C08K005-42; C08K005-10

INCL 524167000

CC 37-6 (Plastics Manufacture and Processing)

IT 4089-58-1

RL: RCT (Reactant); RACT (Reactant or reagent)
 (fluorination of)

IT 69116-73-0P 78010-39-6P

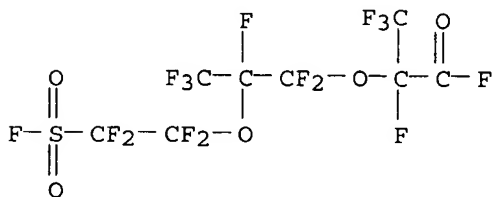
RL: PREP (Preparation)
 (preparation of)

IT 4089-58-1

RL: RCT (Reactant); RACT (Reactant or reagent)
 (fluorination of)

RN 4089-58-1 CAPLUS

CN Propanoyl fluoride, 2,3,3,3-tetrafluoro-2-[1,1,2,3,3,3-hexafluoro-2-[1,1,2,2-tetrafluoro-2-(fluorosulfonyl)ethoxy]propoxy]- (9CI) (CA INDEX NAME)

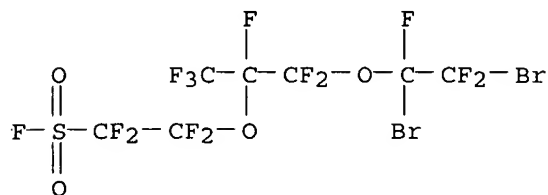


IT 78010-39-6P

RL: PREP (Preparation)
(preparation of)

RN 78010-39-6 CAPLUS

CN Ethanesulfonyl fluoride, 2-[1-[(1,2-dibromo-1,2,2-trifluoroethoxy)difluoromethyl]-1,2,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoro- (9CI) (CA INDEX NAME)



L46 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1981:605062 CAPLUS

DOCUMENT NUMBER: 95:205062

TITLE: Solutions of copolymers of perfluoroethylene and a fluorosulfonated or carboxylated vinyl monomer in a saturated perhalogenated liquid

INVENTOR(S): Silva, Raimund Heinrich; Resnick, Paul Raphael; Smith, Roger Alton

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA

SOURCE: Fr. Demande, 33 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2465753	A1	19810327	FR 1980-20590	19800925
FR 2465753	B1	19840427		
US 4348310	A	19820907	US 1980-176595	19800808
PRIORITY APPLN. INFO.:			US 1979-79173	A 19790926
			US 1980-176595	A 19800808

AB ClCF2CClFOCF2CF(CF3)OCF2CF2SO2F (I) [68860-43-5], ClCF2CClFOCF2CF(CF3)OCF2CF2CO2Me [78010-35-2], FSO2CF2CF2OCF(CF3)CF2OCF(CF3)SO2F [78010-40-9], and 19 similar compds. are used as solvents for copolymers of F2C:CF2 and F2C:CFOCF2CF(CF3)OCF2CF2CO2Me or F2C:CFOCF2CF(CF3)OCF2CF2SO2F (II). The solns. are useful for the preparation and repair of membranes, for coating catalyst supports in the preparation of catalyst, etc. Thus, a solution of 2 g F2C:CF2-II copolymer [26654-97-7] in 45 g I was cast to prepare a membrane. The membrane was hydrolyzed with aqueous NaOH at 80° to prepare an ultrafiltration membrane which gave 82.6% rejection of NaCl during filtration.

IC C08F214-26; C08F002-06; B01D013-00; B01J035-00

CC 37-1 (Plastics Fabrication and Uses)

IT 4089-58-1

RL: RCT (Reactant); RACT (Reactant or reagent)
(decarbonylation of)

IT 27744-59-8P 78010-36-3P 78010-39-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

IT 677-67-8

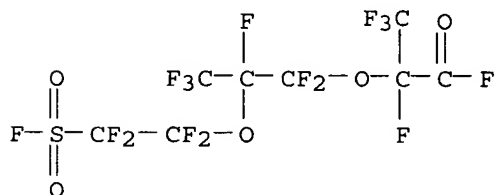
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with tetrafluoroethylene)

IT 4089-58-1

RL: RCT (Reactant); RACT (Reactant or reagent)
(decarbonylation of)

RN 4089-58-1 CAPLUS

CN Propanoyl fluoride, 2,3,3,3-tetrafluoro-2-[1,1,2,3,3,3-hexafluoro-2-[1,1,2,2-tetrafluoro-2-(fluorosulfonyl)ethoxy]propoxy]- (9CI) (CA INDEX NAME)

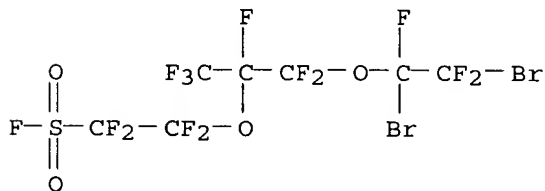


IT 78010-39-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 78010-39-6 CAPLUS

CN Ethanesulfonyl fluoride, 2-[1-[(1,2-dibromo-1,2,2-trifluoroethoxy)difluoromethyl]-1,2,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoro- (9CI) (CA INDEX NAME)

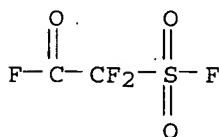


IT 677-67-8

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with tetrafluoroethylene)

RN 677-67-8 CAPLUS

CN Acetyl fluoride, difluoro(fluorosulfonyl)- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



=> file casreact

FILE 'CASREACT' ENTERED AT 11:42:52 ON 27 FEB 2006

~~REACTION SEARCH~~

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FILE CONTENT:1840 - 26 Feb 2006 VOL 144 ISS 9

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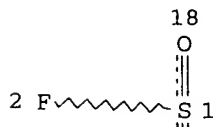
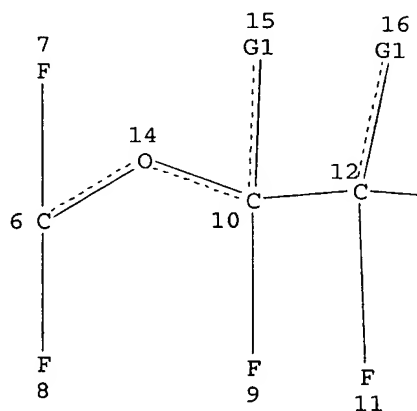
*
* CASREACT now has more than 10 million reactions *
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Some CASREACT records are derived from the ZIC/VINITI database (1974-1991) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

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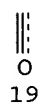
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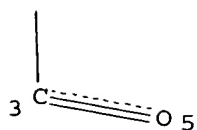
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Page 1-B



O
19



Page 2-A

VAR G1=20/21

VAR G2=5/14

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

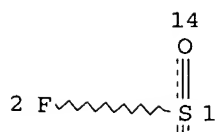
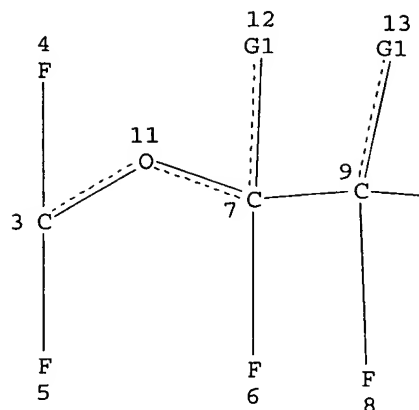
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STEREO ATTRIBUTES: NONE

L11 147 SEA FILE=REGISTRY SSS FUL L7

L13 STR

Cl 16Br 17



Page 1-A

— F 10

Page 1-B

Page 2-A

VAR G1=16/17

NODE ATTRIBUTES:

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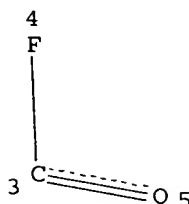
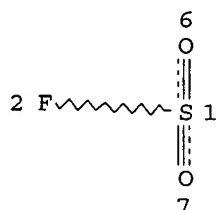
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 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

L15 6 SEA FILE=REGISTRY SUB=L11 SSS FUL L13
 L17 STR



NODE ATTRIBUTES:

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DEFAULT MLEVEL IS ATOM

MLEVEL IS CLASS AT 1 2 3 4 5 6 7
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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 NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE

L19 141 SEA FILE=REGISTRY SUB=L11 SSS FUL L17
 L28 1 SEA FILE=CASREACT ABB=ON PLU=ON L19/RRT (L) L15/PRO

=> d ibib abs hit L28 1

L28 ANSWER 1 OF 1 CASREACT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 141:260266 CASREACT

TITLE: Process for preparing (per)fluorohalogen ethers by the
 reaction of acyl fluorides with halogenated
 1,2-difluoroethylenes

INVENTOR(S): Tortelli, Vito; Calini, Pierangelo; Millefanti,
 Stefano

PATENT ASSIGNEE(S): Solvay Solexis S.p.A., Italy

SOURCE: Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

NOTE:
 Casreact results
 not printed with
 author search,
 though this is
 author's work.

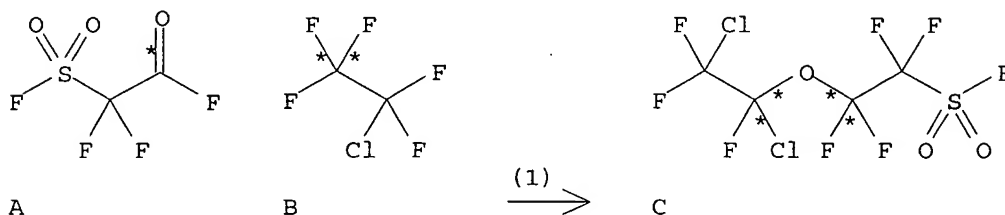
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1457484	A1	20040915	EP 2004-4344	20040226
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2004269535	A2	20040930	JP 2004-65994	20040309
US 2004199009	A1	20041007	US 2004-795995	20040310
CN 1539818	A	20041027	CN 2004-10033085	20040311
PRIORITY APPLN. INFO.:			IT 2003-MI444	20030311

OTHER SOURCE(S): MARPAT 141:260266

AB A process for preparing (per)fluorohalogen ethers containing the sulfonyl fluoride group FSO₂RCF₂OCAFCA1F₂ [A, A1 = Cl, Br; R = (per)fluorinated optionally containing one or more oxygen atoms] is described which comprises the reaction of acyl fluorides FSO₂RCOF in the liquid phase with elemental fluorine and with olefinic compds. CAF:CA1F at -120° to -20°, optionally in the presence of a solvent inert under the reaction conditions.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

RX(1) OF 1 A + B ==> C



RX(1) RCT A 677-67-8, B 76-15-3
 PRO C 144728-59-6
 SOL 76-15-3 Ethane, chloropentafluoro-
 CON SUBSTAGE(2) 3 hours